

## Claims

1. Device for controlling an authentication in a telecommunications network with  
5 a subscriber terminal device (1) for connecting a customer premises equipment (2) via an external data transmission interface (WAN) to an exchange (3) and for realizing an internal data transmission interface (LAN) in the customer premises equipment (2),  
10 with the external data transmission interface (WAN) having at least one physical data transmission channel and an authentication channel, characterized by  
a control unit (4)  
15 for monitoring data traffic (Te) on the external data transmission interface (WAN) and/or data traffic (Ti) on the internal data transmission interface (LAN) meant for the external data transmission interface (WAN), and for controlling logon/logoff procedures in the  
20 authentication channel relative to the monitored data traffic (Ti, Te).
2. Device in accordance with claim 1,  
characterized in that the control unit (4) monitors the  
25 data traffic (Ti, Te) in a predetermined time window.
3. Device in accordance with claim 1 or 2,  
characterized in that the control unit (4) monitors data  
traffic (DDe) on the external data transmission interface  
30 (WAN) in the downstream direction and/or data traffic (DUi) on the internal data transmission interface (LAN) in the upstream direction.

4. Device in accordance with one of claims 1 to 3,  
characterized in that the subscriber terminal device (1)  
has an xDSL modem.
- 5 5. Device in accordance with one of claims 1 to 4,  
characterized in that the external data transmission  
interface (WAN) realizes data transmission in accordance  
with the ITU G.992.1 standard or ITU G.992.2 standard.
- 10 6. Device in accordance with one of claims 1 to 5,  
characterized in that the authentication channel has an  
authentication protocol in accordance with a point-to-  
point or a point-to-point protocol over Ethernet.
- 15 7. Device in accordance with one of claims 1 to 6,  
characterized in that the internal data transmission  
interface (LAN) is connected to at least one data  
processing unit (5; 50, 5X) in the customer premises  
equipment (2).
- 20 8. Device in accordance with one of claims 1 to 7,  
characterized in that the control unit (4) also controls  
the physical data transmission channel of the external  
data transmission interface (WAN) relative to the  
25 monitored data traffic (Ti, Te).
9. Device in accordance with one of claims 1 to 7,  
characterized in that the data transmission channel of  
the external data transmission interface (WAN) is always  
30 active regardless of the control unit (4).
10. Method for controlling an authentication in a  
telecommunications network with the following steps:

- a) monitoring data traffic (Te) on an external data transmission interface (WAN) and/or data traffic (Ti) on an internal data transmission interface (LAN) meant for the external data transmission interface (WAN), of a subscriber terminal (1) for connecting a customer premises equipment (2) to an exchange (3); with the external data transmission interface (WAN) having at least one physical data transmission channel and an authentication channel; and
- b) controlling logon/logoff procedures in the authentication channel relative to the monitored data traffic (Te,Ti).
11. Method in accordance with claim 10, characterized in that in step a) a predetermined time window of data traffic (Ti), (Te) is monitored.
12. Method in accordance with claim 10 or 11, characterized in that in step a) downstream data traffic (DDe) of the external data transmission interface (WAN) and/or upstream data traffic (DUi) of the internal data transmission interface (LAN) is monitored.
13. Method in accordance with one of claims 10 to 12, characterized in that the subscriber terminal device (1) has an xDSL modem, and the external data transmission interface (WAN) transmits data in accordance with the ITU G.992.1 standard or the ITU G.992.2 standard.
14. Method in accordance with one of claims 10 to 13,

characterized by the further step c) controlling the physical data transmission channel of the external data transmission interface (WAN) relative to the monitored data traffic (Te, Ti).

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15. Method in accordance with one of claims 10 to 13, characterized in that the data transmission in the data transmission channel of the external data transmission interface (WAN) is always active regardless of the control in step b).

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